Bridgeport Brass d/b/a Olin Brass Mr. Scott Stoner P.O. Box 51519 Indianapolis, IN 46251-0519 August 26, 1999

Re: 097-11196

First Administrative Amendment to

Part 70 097-6211-00005

Dear Mr. Stoner:

Bridgeport Brass was issued a permit on December 29, 1998 for a Secondary Brass Production Operation. This administrative amendment incorporated changes to the existing permit language negotiated by OAM, Bridgeport Brass and ERMD. A letter requesting a change was received on February 1, 1999. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

- (a) Bridgeport Brass has shut down it's Rod, Wire and Tube Operations. As a result of this shut down the following significant emitting activities need to be deleted form the permit:
  - (1) Rod Mill Annealing Rotary Billet Furnace, identified as emission unit 8, equipped with a 15.6 million Btu per hour natural gas fired burner. Emissions from this emission unit are exhausted out one stack identified as stacks 0008. This emission unit was installed in 1942.
  - Tube Annealing Holcroft furnace #9370, identified as emission unit 13, with atmosphere generator maximum capacity of 2.2 million Btu per hour and radiant tube system with maximum capacity of 1.2 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. Emissions from this emission unit are exhausted out two stack identified as stack 0013N and 0013S. This emission unit was installed in 1990.
  - (3) Tube Annealing Electric Furnace Company furnace #4650, identified as emission unit 14, with atmosphere generator maximum capacity of 2.2 million Btu per hour and direct heating with maximum capacity of 5.6 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. Emissions from this emission unit are exhausted out two stack identified as stack 0014N and 0014S. This emission unit was installed in 1968.
  - (4) Tube Annealing General Electric furnace #4209, identified as emission unit 15, with atmosphere generator maximum capacity of 3.7 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired

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atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. Emissions from this emission unit are exhausted out two stack identified as stack 0015N and 0015S. This emission unit was installed in 1961.

(5) Preheat Furnace, identified as emission unit 16, equipped with a 10.7 million Btu per hour natural gas fired burner. Emissions from this emission unit are exhausted out one stack identified as stack 0016. This emission unit was installed in 1996.

As a result of the shut down of the equipment mentioned above the source is still subject to the Part 70 operating permit regulation 326 IAC 2-7 and is still classified as a major source under the Prevention of Significant Deterioration regulation 326 IAC 2-2. The following changes were made to the permit as a result of the shut down of the equipment mentioned above;

- (1) Section A.1 of the permit was revised to reflect the removal of the equipment mentioned above.
- (2) Section D.4 facility description box was revised to reflect the removal of the equipment mentioned above.
- (3) Condition D.4.1 was modified to reflect the removal of the emission units mentioned above. Condition D.4.1 revised condition reads as follows:

# D.4.1 Particulate Matter (PM) [326 IAC 6-1-2][IAPCB Reg. II-1]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from emissions units  $\frac{8}{7}$ , 9, 10, 11, and 12, 13, 14, 15 and 16 shall be limited to 0.03 grain per dry standard cubic foot.

- (b) Olin Brass has shut down it's Rod, Wire and Tube Operations. As a result of this shut down the following specifically regulated insignificant emitting activities need to be deleted form the permit:
  - (1) Cold Cleaner Degreasing operations, that do not exceed 145 gallons usage per 12 months.
  - (2) Billet Saw Casting Shop identified as emission unit 220 uncontrolled

As a result of the shut down of the equipment mentioned above the source is still subject to the Part 70 operating permit regulation 326 IAC 2-7 and is still classified as a major source under the Prevention of Significant Deterioration regulation 326 IAC 2-2. As a result of the shut down of the equipment mentioned above the following changes were made to the permit.

- (1) Section A.3 of the permit was revised to reflect the removal of the equipment mentioned above.
- (2) Section D.5 facility description box was revised to reflect the removal of the equipment mention above.

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- (3) Condition D.5.1 for Cold Cleaner Degreaser Operation and Control was removed from the permit.
- (4) Condition D.5.2 was modified to reflect the removal of emission unit 220. The revised condition reads as follows;

#### D.5.2 Particulate Matter (PM) [326 IAC 6-3][IAPCB Reg. II-1]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from emission units 165, 217, <del>220,</del> 221 and 222 shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf).

(c) Bridgeport Brass has temporary shutdown emission unit 4 and has request that the stack testing requirements contained in condition D.2.5 be revised to reflect this situation. Based on negotiations with OAM, ERMD and OLC, condition D.2.5 was revised to read as follows:

#### D.2.5 Testing Requirements

**Within** During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing on emission units 4, 5 and 6 utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM or ERMD may require compliance testing when necessary to determine if these emission units are in compliance.

PM testing on emission unit 4 is deferred until that unit is in operation. The Permittee shall notify IDEM and ERMD at the time emission unit 4 is returned to service and shall perform PM testing utilizing Method 5 or 17 (40 CFR 60, Appendix B), or other methods as approved by the Commissioner, within 90 days of the date the unit is returned to service. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM or ERMD may require compliance testing when necessary to determine if these emission units are in compliance.

(d) Bridgeport brass has indicated that the pressure drop range used for compliance monitoring does not represent the pressure drop observed during normal operation of this control devise. Based on negotiations with OAM, ERMD and OLC, condition D.2.8 was revised to read as follows:

#### D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the each of the three baghouses used in conjunction with emissions units 4, 5 and 6, at least once daily when the furnaces are in

operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each of the three baghouses shall be maintained within the range of 0.5 to 2.0 **6.1** inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and ERMD and shall be calibrated at least once every six (6) months.

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(e) Bridgeport Bass had expressed concerns as to what would constitute a bag failure under the requirements of condition D.2.8. Based on negotiations with OAM, ERMD and OLC, condition D.2.8 was revised to read as follows:

# D.2.8 Broken Bag Detection

In the event that bag failure has been observed:

- (a) In the event of a bag failure that causes the Permittee to operate outside the parameters in the permit for pressure drop or to emit visible emissions, The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mr. Patrick Coughlin, at (317) 327-2510.

Sincerely,

Robert F. Holm Administrator ERMD

Attachments Reviewer's Initials

cc: Files

Compliance Data Inspector - Jeff Hege Compliance Data Section - Karen Nowak Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner Office of Legal Counsel - Loraine Seyfried

# PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT and INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

# Bridgeport Brass d/b/a Olin Brass 1800 S. Holt Road Indianapolis, Indiana 46241

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17 and the Code of Indianapolis and Marion County, Chapter 511.

Operation Permit No.: T097-6211-00005	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: December 29, 1998
Robert F. Holm, PH.D, Administrator Indianapolis Environmental Resources Management Division	

First Administrative Amendment: T097-11196	Affected Pages: 6, 7, 8, 35, 36, 37, 40, 41, 42, 43, 44
Issued by:  Robert F. Holm, PH.D, Administrator Indianapolis Environmental Resources Management Division	Issuance Date:

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- (f) Eleven (11) Ajax electric furnaces and three (3) Inductotherm electric furnaces identified as emission unit 6, with a combined maximum operating capacity of 27.5 ton of castings per hour. The eleven (11) Ajax electric furnaces are identified as furnaces 19 through 26, 28, 31, and 32. The three (3) Inductotherm electric furnaces are identified as furnaces 38, 39 and 40. Emissions from these furnaces are controlled by a Carborundum baghouse (south) which vents out one stack identified as stack 0006. The Ajax electric furnaces were all installed prior to 1968. The Inductotherm electric furnaces were installed in 1994.
- (g) Automated equipment rotary chip drying kiln, identified as emission unit 7, for the recycling of brass mill scrap. The kiln has a maximum throughput capacity of 4.5 ton of brass chips per hour. The kiln is fired with natural gas only and has a maximum heat input capacity of 6.5 million Btu per. Emissions from this process are controlled by an afterburner followed by an American Air Filter type N roloclone. Emissions from this emitting unit are exhausted out one stack identified as stack 0007. This emission unit was installed in 1973.
- (i) Sheet Metal Annealing General Electric Cake Heater, identified as emission unit 9, with a maximum heat input capacity of 27 million Btu per hour. Emissions from this emission unit are exhausted out two stacks identified as stacks 0009N and 0009S. This emission unit was installed in 1962.
- (j) Sheet Mill Annealing Surface Combustion Furnace #84 SA, identified as emission unit 10, equipped with an atmosphere generator with a maximum capacity of 7 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. Emissions from this emission unit are exhausted out one stack identified as stack 0010. This emission unit was installed in 1981.
- (k) Sheet Mill Annealing Electric Furnace Company Furnace #83 SA, identified as emission unit 11, equipped with a atmosphere generator with a maximum capacity of 2.8 million Btu per hour and a radiant tube system with a maximum heat input capacity of 13.9 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. Emissions from this emission unit are exhausted out one stack identified as stack 0011. This emission unit was installed in 1989.
- (I) Sheet Mill Annealing Surface Combustion Furnace #82 SA, identified as emission unit 12, with atmosphere generator with a maximum capacity of 5.0 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing

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furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. Emissions from this emission unit are exhausted out one stack identified as stack 0012. This emission unit was installed in 1956.

# A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Carpenter Shop Saw identified as emission unit 165 uncontrolled
- (b) Slab Mill Cutters identified as emissions unit 217 uncontrolled
- (c) Slab Saw Casting Shop identified as emission unit 221 uncontrolled
- (d) Box Shop Skip Saw identified as emission unit 222 controlled by a cyclone.

# A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

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# **SECTION D.2**

# **FACILITY OPERATION CONDITIONS**

# Facility Description [326 IAC 2-7-5(15)]

- (d) Six (6) Ajax electric furnaces, identified as emission unit 4, with a combined maximum operating capacity of 12.5 ton of castings per hour. The individual furnaces are identified as furnaces 1 through 6. Emissions from these furnaces are controlled by a Carborundum baghouse (north) which exhausts out one stack identified as stack 0004. These furnaces were installed prior to 1968.
- (e) Eight (8) Ajax electric furnaces, identified as emission unit 5, with a combined maximum operating capacity of 26.08 ton castings per hour. The individual furnaces are identified as furnaces 8, 9,10,11,13,14,15 and 16. Emissions from these furnaces are controlled by a Carborundum baghouse (middle) which exhausts out one stack identified as stack 0005. These furnaces were installed prior to 1968.
- (f) Eleven (11) Ajax electric furnaces and three (3) Inductotherm electric furnaces identified as emission unit 6, with a combined maximum operating capacity of 27.5 ton of castings per hour. The eleven (11) Ajax electric furnaces are identified as furnaces 19 through 28, 31, and 32. The three (3) Inductotherm electric furnaces are identified as furnaces 38, 39 and 40. Emissions from these furnaces are controlled by a Carborundum baghouse (south) which vents out one stack identified as stack 0006. The Ajax electric furnaces were all installed prior to 1968. The Inductotherm electric furnaces were installed in 1994.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-1-2][IAPCB Reg. II-2]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from emissions units 4, 5 and 6 shall be limited to 0.03 grain per dry standard cubic foot.

# D.2.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total throughput of brass melted in the Inductotherm electric furnaces 38, 39 and 40 shall be limited to 20,202 tons per twelve (12) consecutive month period. This usage limit is required to limit the potential to emit of PM-10 to less than 15 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.3 Opacity Limitation (PM) [40 CFR Part 60 Subpart M][326 IAC 12][IAPCB Reg. 12]

Pursuant to 40 CFR Part 60.132(b) the opacity from emission unit 6 shall not exceed ten percent (10%).

#### D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for emission units 4, 5 and 6 and the associated control devices.

#### **Compliance Determination Requirements**

# D.2.5 Testing Requirements

Within 36 months after issuance of this permit, the Permittee shall perform PM testing on emission units 5 and 6 utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM or ERMD may require compliance testing when necessary to determine if these emission units are in compliance.

PM testing on emission unit 4 is deferred until that unit is in operation. The Permittee shall notify IDEM and ERMD at the time emission unit 4 is returned to service and shall perform PM testing utilizing Method 5 or 17 (40 CFR 60, Appendix B), or other methods as approved by the Commissioner, within 90 days of the date the unit is returned to service. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM or ERMD may require compliance testing when necessary to determine if these emission units are in compliance.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

# D.2.6 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhausts for emission units 4, 5 and 6 shall be performed during normal daylight operations when the process is in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the each of the three baghouses used in conjunction with emissions units 4, 5 and 6, at least once daily when the furnaces are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each of the three baghouses shall be maintained within the range of 0.5 to 6.1 inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and ERMD and shall be calibrated at least once every six (6) months.

#### D.2.8 Broken Bag Detection

In the event that bag failure has been observed:

(a) In the event of a bag failure that causes the Permittee to operate outside the parameters in the permit for pressure drop or to emit visible emissions, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the

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# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.6, the Permittee shall maintain records of daily visible emission notations of the stack exhausts for emission units 4, 5 and 6.
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain the following:
  - (1) Daily records of the Inlet and outlet differential static pressure during normal operation when venting to the atmosphere
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the guarter being reported.

#### **SECTION D.4**

#### **FACILITY CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

- (i) Sheet Metal Annealing General Electric Cake Heater, identified as emission unit 9, with a maximum heat input capacity of 27 million Btu per hour. The maximum charge capacity for this furnace is 56,000 pounds of cold metal per hour. Emissions from this emission unit are exhausted out two stacks identified as stacks 0009N and 0009S. This emission unit was installed in 1962.
- (j) Sheet Mill Annealing Surface Combustion Furnace #84 SA, identified as emission unit 10, equipped with an atmosphere generator with a maximum capacity of 7 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. The maximum charge capacity for this furnace is 14,300 pounds of hard metal per hour. Emissions from this emission unit are exhausted out one stack identified as stack 0010. This emission unit was installed in 1981.
- (k) Sheet Mill Annealing Electric Furnace Company Furnace #83 SA, identified as emission unit 11, equipped with a atmosphere generator with a maximum capacity of 2.8 million Btu per hour and a radiant tube system with a maximum heat input capacity of 13.9 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. The maximum charge capacity for this furnace is 20,000 pounds of hard metal per hour. Emissions from this emission unit are exhausted out one stack identified as stack 0011. This emission unit was installed in 1989.
- (I) Sheet Mill Annealing Surface Combustion Furnace #82 SA, identified as emission unit 12, with atmosphere generator with a maximum capacity of 5.0 million Btu per hour. The atmospheric generator which is equipped to control the ratio of gas to air to produce the desired atmospheric composition. The controlled volumes of air and gas are admitted into a refractory line combustion chamber and partially combusted over a catalyst. The unburned hydrocarbons constituents in the fuel is cracked into hydrogen and carbon monoxide by the heat generated during partial combustion. After the combustion process, the atmosphere generated is sent to the heat treat/annealing furnace where it is used to protect the metal from oxidizing. The maximum gas to air ratio is 9 to 1. The maximum charge capacity for this furnace is 12,000 pounds of hard metal per hour. Emissions from this emission unit are exhausted out one stack identified as stack 0012. This emission unit was installed in 1956.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-1-2][IAPCB Reg. II-1]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from emissions units 9, 10, 11, and 12 shall be limited to 0.03 grain per dry standard cubic foot.

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# **Compliance Determination Requirements**

# D.4.2 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.4.3 Record Keeping Requirements

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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#### **SECTION D.5**

#### **FACILITY OPERATION CONDITIONS**

# Insignificant Emitting Activities:

- (a) Carpenter Shop Saw identified as emission unit 165 uncontrolled
- (b) Slab Mill Cutters identified as emissions unit 217 uncontrolled
- (c) Slab Saw Casting Shop identified as emission unit 221 uncontrolled
- (d) Box Shop Skip Saw identified as emission unit 222 controlled by a cyclone.

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.5.1 Particulate Matter (PM) [326 IAC 6-3][IAPCB Reg. II-1]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from emission units 165, 217, <del>220,</del> 221 and 222 shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf).

# **Compliance Determination Requirement**

# D.5.2 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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